

## 4 Results

### 4.1 Stakeholders, Needs & Issues By County

This section of the document contains the results from the information-gathering process within each county. **Important Note:** In many of the meetings held in individual counties, there were issues brought up which are not consortium issues, or issues that can or should be addressed at the consortium level. These concerns have all been documented in the meeting minutes from those meetings (which all appear in an appendix to this document), but they may not be repeated or documented in this section. The concentration in this document was on items relevant to and addressable by the consortium.

*Appendix D – Radio Inventory Summary* contains a detailed listing of the radio inventories of those agencies who answered questionnaires. If questionnaires were not answered, there may not be an entry for those agencies. The one notable exception is Fallon County, where Chuck Lee sent the Project Manager a good deal of information about radios in that county.

## 4.1.4 Carter County

**County Representative:** Candy Loehding, County DES Coordinator. 406-975-6416

**Number Of County Stakeholder Questionnaires Returned:** 3

**Number Of County Agencies Represented By Questionnaires:** 5

### 4.1.4.1 County Interactions

The following matrix details the major stakeholders in the county and how they interact with each other.

Carter County	Ekelaka Area EMTs	Baker Dispatch (9-1-1 co-op)	Dahl Memorial Hospital	Carter County Sheriff's Office	Ekelaka VFD	Dispatch Powder River County	Carter County Coroner	Sheriff's Office	Sheriff's Office, Harding Co. SD	Sheriff's Office, Fallon Co. MT	Sheriff's Office, Powder River Co. MT	Butte Co. WY Dispatch	Crook Co. WY Dispatch	Montana Highway Patrol	MDOT	FBI	BLM	Forest Service	FWP	DNRC	MT Army National Guard	Carter County Road Dept	Carter County, MT	Carter County Fire Warden	TAB Electronics	Alzada Fire Control	
Key:																											
E - Emergency Basis Only																											
B - Emergency & Administrative Basis																											
Ekelaka Area EMTs																											
Baker Dispatch (9-1-1 co-op)	B																										
Dahl Memorial Hospital	E	E																									
Carter County Sheriff's Office	E	B	E																								
Ekelaka VFD	E	E	E	E																							
Dispatch Powder River County	E	E	E	B	E																						
Carter County Coroner	E	E	E	E	E	E																					
Carter County Fire	E	E	E	E	E	E	E																				
Sheriff's Office, Harding Co. SD	E	E	E	E	E	E	E	E																			
Sheriff's Office, Fallon Co. MT	E	E	E	E	E	E	E	E	E																		
Sheriff's Office, Powder River Co. MT	E	E	E	E	E	E	E	E	E	E																	
Sheriff's Office, Butte Co. SD	E	E	E	E	E	E	E	E	E	E	E																
Sheriff's Office, Crook Co. WY	E	E	E	E	E	E	E	E	E	E	E	E															
Butte Co. WY Dispatch	E	E	E	E	E	E	E	E	E	E	E	E	E														
Crook Co. WY Dispatch	E	E	E	E	E	E	E	E	E	E	E	E	E	E													
Montana Highway Patrol	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E												
MDOT	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E											
FBI	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E										
BLM	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E									
Forest Service	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E								
FWP	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E							
DNRC	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E						
MT Army National Guard	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E					
Carter County Road Dept.	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E				
Custer County, MT	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E			
Carter County Fire Warden	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		
Carter County DES	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
TAB Electronics	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
Alzada Fire Control	E	B	E	E	E	B	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	

**Figure 1 – Communication Interactions, Carter County**

#### **4.1.4.2 Questionnaire Results**

##### **Alzada Fire Control**

##### **Date of Interview or Survey Completion:**

*Not answered.*

##### **Location of Agency:**

*Not answered.*

##### **Persons Present And Agencies/Entities Represented:**

*Not Answered.*

##### **Questions**

##### **1. Number of Channels? Simplex or Duplex?**

*Not answered.*

##### **2. List the frequencies your agency currently uses and how each is used.**

*All frequencies for Alzada Fire Control are the same as Carter County's, except law enforcement.*

##### **3. Coverage**

##### **A. Approximately what percentage of your jurisdictional area is adequately covered?**

*95%*

##### **B. How acceptable is that coverage?**

*Very acceptable.*

##### **C. If unacceptable, why (Severe terrain, Gaps, Antenna patterns, In-building problems, etc.)?**

*Not answered.*

##### **D. If acceptable, would an improvement still be desired? Why?**

*Not answered.*

**E. Do you have mobile-to-mobile coverage countywide? If not, do you need it?**

*Yes.*

**4. Current Loading**

**A. Number of Mobile Units**

*12*

**B. Number of Portable Units**

*3*

**5. Any units currently P25 capable/enabled? Which ones?**

*No.*

**6. Dispatch**

**A. How is dispatch currently conducted?**

*We currently respond when our fire bar # rings. We can be dispatch however out of either Broadus or Baker.*

**B. From Where?**

*Not answered.*

**[Note: The portion of the questionnaire from this point to question 13 is missing.]**

**13. List, in priority order, up to five (5) factors that will be critical to future radio systems in your county, city, or area of jurisdiction.**

- 1. Reliability*
- 2. Affordable*
- 3. Simple to Use*
- 4. Dependable*
- 5. Not answered*



**14. Please use this space to add any items or comments which you would like to make that have not been covered above.**

*Alzada Fire Control recently purchased new Kenwood mobiles with the help of a grant. We are currently very pleased with our equipment. The possibility of another repeater in western Carter County to help alleviate some dead spots would be out only major concern.*



**Ekalaka Area EMTs** [Note: This questionnaire uses an older format with slightly different questions.]

**Date of Interview or Survey Completion:**

*Not answered.*

**Location of Agency:**

*Carter County.*

**Persons Present And Agencies/Entities Represented:**

*Deb Yost, Director*

**Questions**

**1. Number of Channels? Simplex or Duplex?**

*Duplex – 1.*

**2. List the frequencies your agency currently uses and how each is used.**

*Not answered.*

**3. Locations and Characteristics of Each Base Site. Use an additional piece of paper if necessary**

**Site One**

**A. Channels available at the site**

*Not answered.*

[Note: The portion of the questionnaire from this point to question 13 is missing.]

**2. Current Loading**

**A. Number of Mobile Units**

*2 – each ambulance*

**B. Number of Portable Units**

*15 EMTs – 1 with Fire – 1 private.*

**3. Any units currently P25 capable/enabled? Which ones? ?**

**4. Dispatch**

**A. How is dispatch currently conducted?**

*Not answered.*

**B. From Where?**

*Baker, Montana*

**C. Hardware used?**

*Not answered.*

**D. Number of positions?**

*Not answered.*

**E. Adequate? If not, why? How could it be improved?**

*Yes.*

**5. Missing from the questionnaire.**

**6. What are the issues, problems, or challenges with your current system not already covered above?**

*Our three most urgent needs are 1) a radio for the back of our #2 ambulance. We have a radio in the front of this ambulance but because of monetary problems we have not gotten a back unit yet. 2) At least 90% of our hand held radios are over 10 years old and will need to be replaced when this new system is implemented because they won't be compatible with the system. 3) I have no idea if our communication problems with Dahl Memorial Healthcare are because of the need of new equipment, placement of equipment or whatever they cause may be... We have a terrible time communicating with the facility until we are within a mile or two away. It would be a definite improvement for us if we could have cell phones with boosters installed in the ambulance. Also, if we had headsets for the back radios. As it is we must move from the side of the patient to the patient's head to use the radio in the back of the rig. If all the radio equipment could be encrypted it would be wonderful.*

**7. Missing from the questionnaire**

**11. What other agencies do you need to communicate with?**

**A. On a day-to-day (administrative) basis.**

*On a day-to-day basis our only communication is with Fallon County Dispatch at beeper check.*

**B. On an emergency basis.**

*On an emergency basis we communicate first with Fallon County Dispatch. Then depending upon our needs we have communicated with Carter County Law Enforcement, Dahl Memorial Healthcare, Ekalaka Volunteer Fire Department, Fallon County Medical or whatever receiving facility we are transporting to. Out of state transfers are difficult because it is almost impossible to establish communications with the facilities.*

**12. Please describe your radio communications during typical day-to-day (administrative) activities and during emergencies.**

1. *dispatch Fallon Cnty*
2. *Dahl Memorial H.C Ekalaka*

**13. What features would you like to see in a new system?**

*Encryption, countywide mobile-to-mobile coverage.*

**14. List, in priority order, up to five (5) communications improvements needed from initial dispatch to call completion.**

1. *Security (encryption)*
2. *Coverage*
3. *Better communication with facilities in S.D.*

**15. List, in priority order, up to five (5) factors that will be critical to future radio systems in your county, city, or area of jurisdiction.**

1. *Encryption*
2. *Coverage*
3. *Communications with other agencies*

**16. Please use this space to add any items or comments which you would like to make that have not been covered above.**

*Not answered.*





**Carter County Sheriff/Coroner/Fire Warden** [Note: This questionnaire uses an older format with slightly different questions.]

**Date of Interview or Completion:**

*Not answered.*

**Location of Agency:**

*Ekalaka, Montana*

**Persons Present And Agencies/Entities Represented:**

*Carter County Sheriff/Coroner*

**Questions**

**1. Number of Channels? Simplex or Duplex?**

*4 Duplex*

*EMS 280 – EMS Tactical*

*BLUE – Law Enforcement Tactical*

*RED – Fire Tactical*

*GOLD – Road Crew*

**2. List the frequencies your agency currently uses and how each is used.**

*155.025 – Call out for emergencies, Law, Fire, EMS, Road. Law Enforcement uses repeater for most Law Enforcement situations.*

**3. Locations and Characteristics of Each Base Site. Use an additional piece of paper if necessary**

**Site One**

**A. Channels available at the site.**

*Sheriff's Office.*

**B. Fixed Base?**

*Yes.*



**C. Control Status?**

*Used as com.*

**D. Repeater? How controlled? (Microwave link, Wireline, CTCSS)**

*CTCSS*

**E. Hardware?**

*Not answered.*

**F. How powered? (Solar, etc.)**

*Electricity.*

**Site Two**

**A. Channels available at the site.**

*Highway 212 mile marker 119. S. Repeater, 155.025 transmit.*

**B. Fixed Base?**

*No.*

**C. Control Station?**

*No.*

**D. Repeater? How controlled? (Microwave link, Wireline, CTCSS)**

*CTCSS*

**E. Hardware?**

*Not answered.*

**F. How powered? (Solar, etc.)**

*Solar & Wind (Power)*

**Site Three**



**A. Channels available at the site.**

*Not answered.*

**B. Fixed Base?**

*Not answered.*

**C. Control Station?**

*Not answered.*

**D. Repeater? How controlled? (Microwave link, Wireline, CTCSS)**

*Not answered.*

**E. Hardware?**

*Not answered.*

**F. How powered? (Solar, etc.)**

*Not answered.*

**Site Four**

**A. Channels available at the site.**

*Not answered.*

**B. Fixed Base?**

*Not answered.*

**C. Control Station?**

*Not answered.*

**D. Repeater? How controlled? (Microwave link, Wireline, CTCSS)**

*Not answered.*

**E. Hardware?**

*Not answered.*

**F. How powered? (Solar, etc.)**

*Not answered.*

**4. Coverage**

**A. Approximately what percentage of your jurisdictional area is adequately covered?**

*80%*

**B. How acceptable is that coverage?**

*No.*

**C. If unacceptable, why (Severe terrain, Gaps, Antenna patterns, In-building problems, etc.)?**

*Severe terrain. New equipment should help!*

**D. If acceptable, would an improvement still be desired? Why?**

*Not answered.*

**E. Do you have mobile-to-mobile coverage countywide? If not, do you need it?**

*Yes.*

**[Note: The portion of the questionnaire from this point to question 8 is missing.]**

**2. Sharing of System**

**A. Is your system currently being shared?**

*Yes.*

**B. Which parts and with whom?**

*Repeaters / Fallon Co., Powder River, Custer counties in Montana, Crook County, WY, Harding & Butte County, SD, FBI, USAF, BLM, USFS, Montana Dept. of Livestock.*

**3. What is good about your current system?**

No. 8#.

No Fish & Game.

**4. Other issues or problems not already covered above?**

*Equipment compatibility.*

*(Scanner Land)*

**11. What other agencies do you need to communicate with?**

**A. On a day-to-day (administrative) basis.**

*Dispatch Fallon Co. and dispatch Powder River Co.*

**B. On an emergency basis.**

*Harding Co. Sheriff's Office SD.  
Fallon Co. Sheriff's Office MT.  
Powder River Co. Sheriff's Office MT.  
Butte Co. Sheriff's Office SD.  
Crook Co. Sheriff's Office WY.  
Both dispatch's above.  
Butte Co. SD Dispatch  
Crook Co. WY Dispatch*

**12. Please describe your radio communications during typical day-to-day (administrative) activities and during emergencies.**

*Repeaters are used for call out (dispatch). Responders are then to work on their tact[ical] freq. and only use repeater for getting more help or notifying dispatch a situation is done.*

**13. What features would you like to see in a new system?**

*Encryption, countywide mobile-to-mobile coverage.*

**14. List, in priority order, up to five (5) communications improvements needed from initial dispatch to call completion.**

- 1. More cell coverage!*
- 2. Security (encryption)*
- 3. Coverage*
- 4. No over use. (Asking or telling what doughnuts are for sale?? Etc.)*



**15. List, in priority order, up to five (5) factors that will be critical to future radio systems in your county, city, or area of jurisdiction.**

- 1. Encryption*
- 2. Coverage*
- 3. Communications with other agencies*
- 4. Overloading of the radio system (doughnuts)*

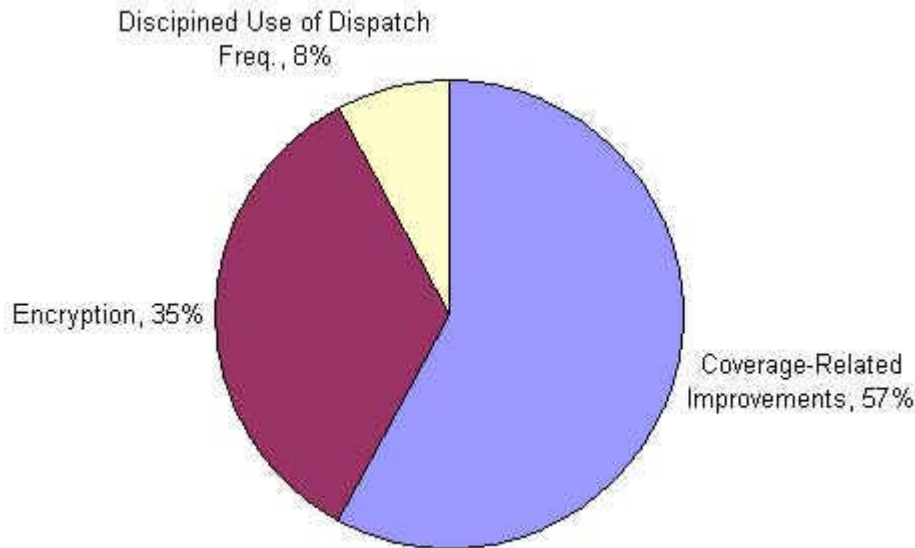
**16. Please use this space to add any items or comments which you would like to make that have not been covered above.**

*Not answered.*

#### 4.1.4.3 County Concerns or Issues

##### 1. Communications Improvements

The following pie chart depicts the communications improvements desired by the responding stakeholders in this county:



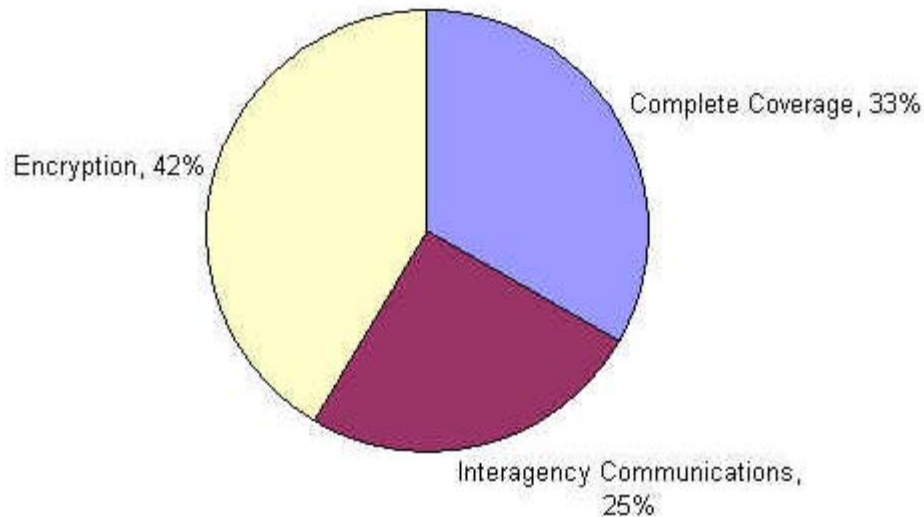
**Figure 2 – Communications Improvements, Carter County**

How to read this chart:

Stakeholders were asked to list, in priority order, the top five communications improvements they would like to see. Those items ranked higher were given a higher point value than those ranked lower. A percentage was then calculated. If the chart contains less than five “wedges,” this means the stakeholders did not list the full five possible items.

## 2. Success Factors

The following chart depicts the success factors considered critical by the responding stakeholders in this county in order for the Eastern Tier radio project to be successful.



**Figure 3 – Critical Success Factors, Carter County**

### How to read this chart:

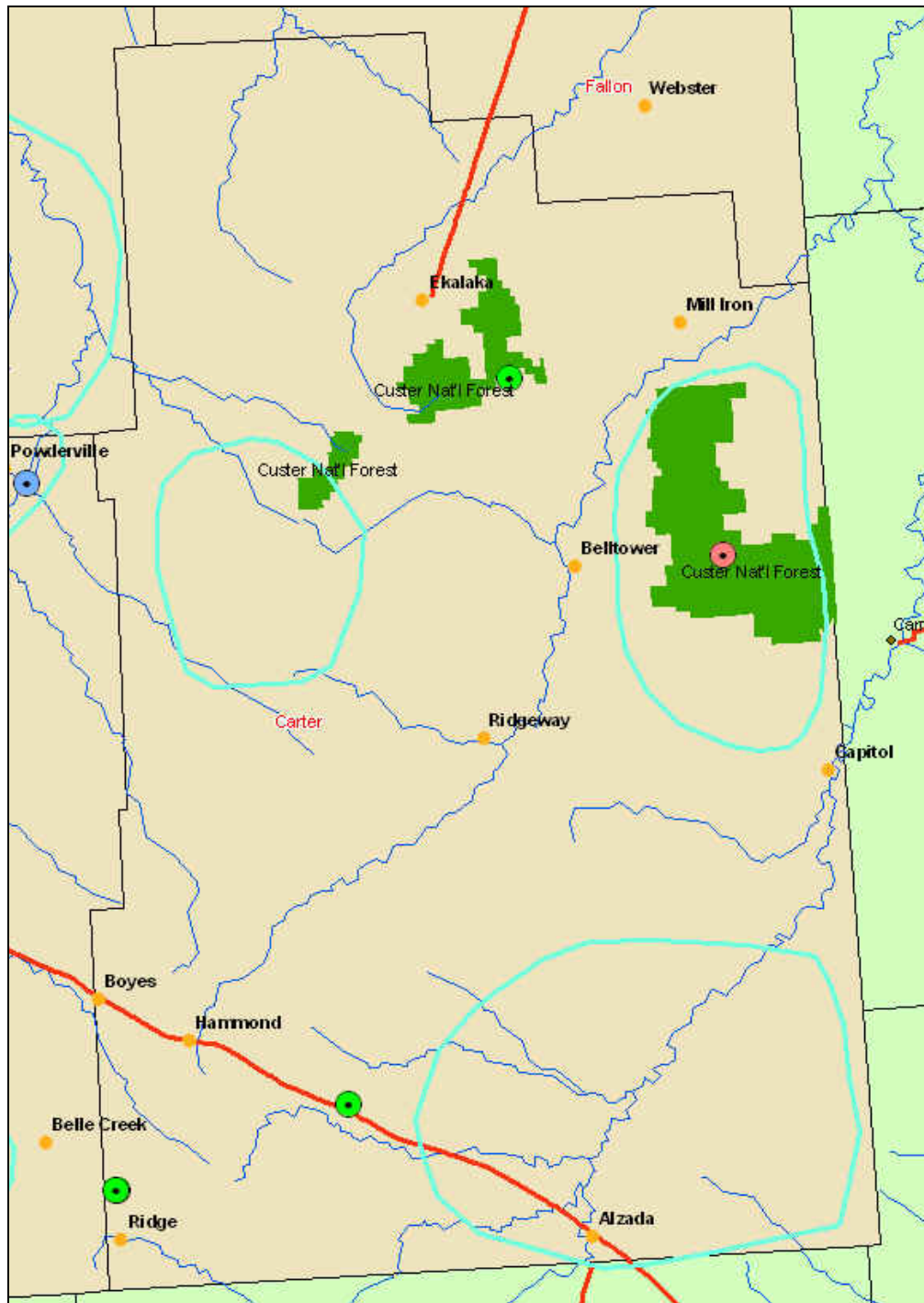
Stakeholders were asked to list, in priority order, the top five factors they felt were most necessary for the Eastern Tier radio project to be successful. Those items ranked higher were given a higher point value than those ranked lower, in order to give higher-ranked items more weight. A percentage for each item was then calculated. If the chart contains less than five items (“wedges”), this indicates the stakeholders did not list the full five possible items.

Some of the same items often appear in both the communications improvements chart and the critical success factors chart. This indicates that these items are very important to the stakeholders.

## 3. Major Dead Spots

There is one in the west-central portion of the county, and one in the east-central portion, in the Long Pines region. This latter location is where the county expects to put up a new tower soon (Tri-Point Lookout Tower area).





**Figure 4 – Dead Spots, Carter County**

Note: Location of “dead spots” is very approximate. In addition, some areas within the dead spots will have better reception than others.

#### 4. Split Dispatch

Carter County is dispatched out of two different locations, Baker (Fallon County) for Ekalaka and the northern part of the county, and Broadus (Powder River County) for Alzada and the southern part of the county. The reasons for this split go back in time a good way and seem to be mostly irrelevant at this point, thanks to large improvements in technology. This split in dispatch can cause difficulties when emergency responders from the northern part of the county have to go south, and vice versa, causing disruptions in radio communication. For some years, Carter County has been exploring the possibility of uniting dispatch for the entire county out of Baker.

#### 5. From an e-mail received from Candy Loehding, Carter County DES Coordinator:

*On the assessments, we would like it noted that cell coverage is limited in Carter County. Because of the limitations, we feel adding boosters and outside antennae for cell service to the vehicles would greatly improve our communication in time crisis. (Our county commission Chairman has one now and he has coverage in may areas a plain hand held cell phone will not work.)*

*We feel this would greatly enhance our communication since it would be much more reliable. The interested parties are all response agencies, with special emphasis on the law, EMS (Ambulance), Fire Vehicles, road crew, commissioners, and DES.*

#### 6. County EMS

The county EMS people have several issues they would like to see addressed. These are covered in their questionnaire (see above). In general, they have a need for additional radios, and better coverage with Dahl Memorial Hospital, as well as the hospitals in the surrounding communities, along with ground and air ambulances. An interoperable system would help a great deal with this.